



AERO SHOW

being included. In the main, the "classic formula" of low-wing cantilever monoplane with engines on the leading edge and wheels retracting into the engine nacelles is adopted, but the mid-wing arrangement appears to be making some headway, notably in military types, which require stowage space for bomb loads and the like.

Curiously enough, it remained for the two Dutch constructors, Fokker and Koolhoven, to introduce the only two real novelties in military aircraft design. The Fokker, with its twin fuselage type tail-carrying booms, has got away from the blind spot under the tail, but in doing so it seems to have run into a blind spot on each side.

Koolhoven's design is certainly ingenious, and it is refreshing to see a designer of long experience breaking new ground in this manner. An engine in the middle of the fuselage has been tried before; two co-axial airscrews running in opposite directions have

The only really large commercial aeroplane in the Show, the Farman 224 carries 40 passengers and a crew of four. In the foreground is the Mureaux 190 C.1 fighter.

THE Fifteenth International Paris Aero Exhibition at the Grand Palais remains open until Sunday week, November 29. In the following pages the exhibits are described under "Military" and "Civil" headings, and on page 561 engine exhibits are briefly dealt with; in next week's issue of "Flight" the engines will be described in detail, and there will also be notes on the British and Continental accessory and component exhibits.

been tried before, but this is the first time both features have been used together and combined with a triangular fuselage cross-section.

There is a rather noticeable absence of large commercial aircraft types at the show, the only exponent *en vrai grandeur* being the four-engined Farman F.224. Probably no particular significance is to be read into this scarcity of large types; it has just happened that no firm had a large machine ready in time for the show.

Of the medium-size commercial aeroplanes shown, the two most interesting are the Russian A.N.T.35, which shows that Russia has been making real solid progress technically during the last couple of years, and the Amiot mailplane, a very beautiful mid-wing monoplane.

Civil and military aviation meet in several new machines at the show. That is to say, racing influence is quite obvious in a good many cases. For instance, the introduction of inverted vee engines in such machines as the Mureaux fighter has produced a type which, although carrying military equipment and obtaining a remarkably high performance, does so with a relatively modest expenditure of power. The lessons of the Coupe Deutsch race have not been missed by French military aircraft designers.

Judging from the engines fitted in the different aeroplanes exhibited, the air-cooled has all but ousted the water-cooled engine in civil aircraft. In military aircraft also the air-cooled is far and away in the majority, but this is probably of less significance than might be imagined, and may be due to the absence from the show of a number of French fighters which are fitted with water-cooled engines.

The absence from the Paris Show of Germany and Italy is greatly felt, but, in spite of this, "The Fifteenth" is quite an interesting and instructive exhibition.

